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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				PE 0604759N: <i>Major T&E Investment</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	51.628	37.522	37.957	-	37.957	34.675	35.592	36.591	37.266	Continuing	Continuing
2195: <i>T & E Investment</i>	44.657	37.522	37.957	-	37.957	34.675	35.592	36.591	37.266	Continuing	Continuing
9999: <i>Congressional Adds</i>	6.971	-	-	-	-	-	-	-	-	0.000	6.971

A. Mission Description and Budget Item Justification

This project improves visibility and commonality of Test and Evaluation (T&E) resources across the Service for Major T&E investment funding. These funds correct major deficiencies, improve T&E capabilities, and increase T&E support effectiveness. The T&E Investment project provides improved test capabilities at the following test facilities: the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center, Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport, Keyport, WA; the Sea Range, Land Range, Electronic Combat Range, Targets, Ordnance T&E Facility, Test Wing Pacific, and the Air Vehicle Modification and Instrumentation facility located at the Naval Air Warfare Center Weapons Division, Point Mugu, CA and China Lake, CA; and the Atlantic Test Range, Air Combat Environment T&E Facility, Electromagnetic Environmental Effects, Air Vehicle Modification and Instrumentation facility, Test Wing Atlantic, Targets, and the Propulsion Systems Evaluation Facility located at the Naval Air Warfare Center Aircraft Division, Patuxent River, MD and the test capabilities located at the Pacific Missile Range Facility, Kauai, HI.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	51.629	37.522	39.441	-	39.441
Current President's Budget	51.628	37.522	37.957	-	37.957
Total Adjustments	-0.001	-	-1.484	-	-1.484
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	-0.058	-	-0.058
• Rate/Misc Adjustments	-	-	-1.426	-	-1.426
• Congressional General Reductions	-0.001	-	-	-	-
Adjustments					

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 9999: *Congressional Adds*

FY 2010	FY 2011

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<u>Congressional Add Details (\$ in Millions, and Includes General Reductions)</u>		FY 2010	FY 2011
Congressional Add: <i>Joint Mission Battle-Space to Support Net-Ready Key Performance Parameters</i>		1.992	-
Congressional Add: <i>Improved Interoperability R&D to Support NAVAIR an</i>		4.979	-
<div style="text-align: right;">Congressional Add Subtotals for Project: 9999</div>		6.971	-
<div style="text-align: right;">Congressional Add Totals for all Projects</div>		6.971	-
<u>Change Summary Explanation</u> Technical: Not applicable. Schedule: Not applicable.			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0604759N: Major T&E Investment				PROJECT 2195: T & E Investment			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
2195: T & E Investment	44.657	37.522	37.957	-	37.957	34.675	35.592	36.591	37.266	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
This project improves visibility and commonality of Test and Evaluation (T&E) resources across the Service for Major T&E investment funding. These funds correct major deficiencies, improve T&E capabilities, and increase T&E support effectiveness. The T&E Investment project provides improved test capabilities at the following test facilities: the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center, Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport, Keyport, WA; the Sea Range, Land Range, Electronic Combat Range, Targets, Ordnance T&E Facility, Test Wing Pacific, and the Air Vehicle Modification and Instrumentation facility located at the Naval Air Warfare Center Weapons Division, Point Mugu, CA and China Lake, CA; and the Atlantic Test Range, Air Combat Environment T&E Facility, Electromagnetic Environmental Effects, Air Vehicle Modification and Instrumentation facility, Test Wing Atlantic, Targets, and the Propulsion Systems Evaluation Facility located at the Naval Air Warfare Center Aircraft Division, Patuxent River, MD and the test capabilities located at the Pacific Missile Range Facility, Kauai, HI.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2010	FY 2011	FY 2012	
Title: UNDERSEA RANGE INVESTMENTS								12.750	16.324	10.894	
Articles:								0	0	0	
Description: This effort funds the modernization, upgrades, and new test capabilities required at the Navy's Major Range Test Facility Base undersea ranges, to include, Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center, Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport, Keyport, WA.											
FY 2010 Accomplishments:											
- Continued the modernization and upgrade of acoustic acquisition, tracking and processing systems and hydrophone arrays at Nanoose & Dabob.											
- Continued the development and installation of broadband capable bottom mounted targets at Nanoose and Dabob.											
- Continued the minor upgrade and modernization of test capabilities at the Atlantic Undersea Test and Evaluation Center (AUTEC) & Nanoose and Dabob.											
- Completed the development of new range post-processing software and modernized hardware at AUTEC.											
- Completed the modernization and upgrade of voice and data communications equipment at AUTEC.											
- Initiated the refurbishment and service life extension of a range vessel at AUTEC. This effort includes conducting a survey of the vessel in FY10 in preparation for a dry dock period in FY11 and FY12.											

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2010	FY 2011	FY 2012
<div>- Initiated the modernization and upgrade of the electronic warfare simulator capability at AUTC.</div> <div>- Initiated the modernization and upgrade of crypto equipment at AUTC.</div> <div>- Initiated the modernization and upgrade of the optical tracking and surveillance system at Nanoose and Dabob.</div> <div>FY 2011 Plans:</div> <div>- Continue all efforts of FY 2010, less those noted as complete above.</div> <div>- Continue the refurbishment and service life extension of a range vessel at AUTC. This effort includes costs incurred during the dry dock period with the majority of that cost in FY 2011.</div> <div>- Complete the modernization and upgrade of the aircraft sonobuoy simulation and stimulation capability at AUTC.</div> <div>- Complete the modernization and upgrade of the electronic warfare simulator capability at AUTC.</div> <div>- Complete the modernization and upgrade of acoustic acquisition, tracking and processing systems and hydrophone arrays at Nanoose & Dabob.</div> <div>- Initiate the overhaul of a range craft. This effort includes cost for the craft to be in dry dock in FY11.</div> <div>- Initiate the acquisition of a new range recovery system at Nanoose and Dabob.</div> <div>FY 2012 Plans:</div> <div>- Continue all efforts of FY 2011, less those noted as complete above.</div> <div>- Complete the refurbishment and service life extension of a range vessel at AUTC.</div> <div>- Complete the development and installation of broadband capable bottom mounted targets at Nanoose and Dabob.</div> <div>- Complete the modernization and upgrade of the optical tracking and surveillance system at Nanoose and Dabob.</div> <div>- Complete the acquisition of a new range recovery system at Nanoose and Dabob.</div> <div>- Initiate the upgrade to the Test and Evaluation target at Nanoose and Dabob.</div>						
<div>Title: OPEN AIR RANGE INVESTMENTS</div> <div>Articles:</div> <div>Description: This effort funds the modernization and upgrades of existing capabilities and the development of new test capabilities required at the MRTFB open air ranges at the Naval Air Warfare Center Aircraft Division, Patuxent River, MD, Naval Air Warfare Center Weapons Division, Point Mugu, CA and China Lake, CA and Pacific Missile Range Facility (PMRF), Kauai, HI.</div> <div>FY 2010 Accomplishments:</div> <div>- Continued the modernization and upgrade of the range timing and sensor interface system at the Naval Air Warfare Center Weapons Division (WD).</div> <div>- Continued the clean up of expended depleted uranium at WD.</div>				19.0070	18.2390	22.4630

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2010	FY 2011	FY 2012
<div>- Continued the modernization and upgrade of communication and fiber infrastructure at WD.</div> <div>- Continued the modernization of the Kineto Tracking Mounts at WD.</div> <div>- Continued the modernization and upgrade of the Multiple Target Instrumented Radar at the Naval Air Warfare Center Aircraft Division (AD).</div> <div>- Continued the development of an automated aircraft maintenance tracking system at AD.</div> <div>- Continued the minor upgrade and modernization of test capabilities at AD and WD.</div> <div>- Completed the modernization and upgrade of the mobile radio communications system at WD.</div> <div>- Completed the modernization and upgrade of the telemetry antenna systems at WD.</div> <div>- Completed the development of a Range Capabilities Master Plan at AD and WD.</div> <div>- Completed the equipment procurement of aircraft machining and prototyping equipment and procure network equipment and computer aided software at AD.</div> <div>- Initiated the modernization and upgrade of crypto equipment at AD and WD.</div> <div>- Initiated the modernization and upgrade of communications and data fiber and equipment at locations around the bay at AD.</div> <div>- Initiated the modernization of optical and radar tracking equipment and telemetry systems at the PMRF.</div> <div>- Initiated and complete an environmental assessment and cultural resource surveys at WD.</div> <div>- Initiated and complete an automated test tracking system at AD.</div> <div>FY 2011 Plans:</div> <div>- Continue all efforts of FY 2010, less those noted as complete above.</div> <div>- Complete the modernization and upgrade of communications and data fiber and equipment at locations around the bay at AD.</div> <div>- Initiate the development and installation of a remote telemetry system for San Nicolas Island at WD.</div> <div>FY 2012 Plans:</div> <div>- Continue all efforts of FY 2011, less those noted as complete above.</div> <div>- Initiate cultural resource surveys at WD.</div> <div>- Initiate aircraft prototyping secure network installation at AD.</div> <div>- Initiate radar service life extension project at AD.</div> <div>- Initiate telemetry re-radiation pod modernization at AD.</div> <div>- Initiate video instrumentation modernization at AD.</div> <div>- Initiate the Mobile Aerial Target Support System modernization at PMRF.</div>						
Title: TEST FACILITIES INVESTMENTS				12.900	2.959	4.600
Articles:				0	0	0

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2010	FY 2011	FY 2012
<p>Description: This effort funds the modernization and upgrades of existing capabilities and the development of new test capabilities required at the MRTFB test facilities at the Naval Air Warfare Center Aircraft Division, Patuxent River, MD, and Naval Air Warfare Center Weapons Division, Point Mugu, CA and China Lake, CA.</p> <p>FY 2010 Accomplishments:</p> <ul style="list-style-type: none">- Continued the modernization and upgrade of the gas turbine engine rotor spin facility at the Naval Air Warfare Center Aircraft Division (AD).- Continued the minor upgrade and modernization of test capabilities at AD and Naval Air Warfare Center Weapons Division (WD).- Continued the modernization and upgrade of the warhead insensitive munitions and safety test site at WD.- Completed the development of a simulation environment visualization and debriefing system and software at AD.- Completed the development of high power Radio Frequency carts at AD.- Completed the modernization and upgrade of aircraft and test instrumentation capability at AD.- Initiated and complete the modernization of laboratory test equipment in the Electromagnetic Interference Laboratory and Electromagnetic Environmental Effects facility at AD.- Initiated and complete the modernization of the large x-ray machine in the Non-Destructive Test and Evaluation facility at WD.- Initiated the development of a Common Data Link test capability at AD. <p>FY 2011 Plans:</p> <ul style="list-style-type: none">- Continue all efforts of FY 2010, less those noted as completed above.- Complete the modernization and upgrade of the warhead insensitive munitions and safety test site at WD.- Complete the development of a Common Data Link test capability at AD. <p>FY 2012 Plans:</p> <ul style="list-style-type: none">- Continue all efforts of FY 2011, less those noted as completed above.- Initiate the helicopter drive system test facility sustainment program at AD.- Initiate the bio-fuel blending and evaluation facility development at AD.- Initiate and complete the drop tower facility upgrade at WD.- Initiate and complete the propulsion control room upgrade at WD.- Initiate and complete upgrade of the CT-1 facility at WD.						
Accomplishments/Planned Programs Subtotals				44.657	37.522	37.957

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C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy Not Applicable.		
E. Performance Metrics Successfully achieve Initial Operational Capability (IOC) of 8-15 Improvement and Modernization (I&M) projects per year and have 90% of test capabilities scheduled in support of Navy acquisition test programs within 180 days.		

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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	6.971	-	-	-	-	-	-	-	-	0.000	6.971
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification
Congressional Add.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011
<i>Congressional Add:</i> Joint Mission Battle-Space to Support Net-Ready Key Performance Parameters	1.992	-
<i>FY 2010 Accomplishments:</i> Initiate prototype effort to develop an interactive joint mission battle-space to support test and evaluation of the net-ready key performance parameter.		
<i>Congressional Add:</i> Improved Interoperability R&D to Support NAVAIR an	4.979	-
<i>FY 2010 Accomplishments:</i> This is a continuing project provided to upgrade the Ship Self Defense System (SSDS) and Cooperative Engagement Capability (CEC) Sensor Network at the Surface/Aviation Interoperability Laboratory (SAIL).		
Congressional Adds Subtotals	6.971	-

C. Other Program Funding Summary (\$ in Millions)
N/A

D. Acquisition Strategy
Not required for Congressional Adds.

E. Performance Metrics
Not required for Congressional Adds.

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